

Public should take precautionary measures against carbon monoxide poisoning

In view of the recent increase in carbon monoxide poisoning cases while taking showers, the Government today (February 2) appealed to members of the public to take precautionary measures against carbon monoxide poisoning and take note of the [Safety Message of Domestic Gas Water Heater](#) of the Electrical and Mechanical Services Department (EMSD).

The Centre for Health Protection (CHP) of the Department of Health received a notification of an additional case involving a 59-year-old man, who was found unconscious when he had a shower in the bathroom of his home on January 30. He was sent to Pok Oi Hospital and was later transferred to Pamela Youde Nethersole Eastern Hospital for treatment. He is now in stable condition.

A site investigation by the EMSD discovered that the subject gas water heater is of a flueless type and should not be used in bathrooms. The model concerned has not been approved by the EMSD and did not bear a "GU" mark. It is preliminarily suspected that the exhaust flue gas generated by the gas water heater without flue was discharged into the bathroom, coupled with poor ventilation, carbon monoxide accumulated due to insufficient oxygen for combustion and thus led to the carbon monoxide poisoning. The EMSD has seized the subject gas water heater for further investigation. If the investigation results confirm that there was a contravention of the Gas Safety Ordinance, the EMSD will consider initiating prosecution action against the person concerned.

The EMSD reiterated that using unsafe gas appliances imposes significant safety risks. When a flueless gas water heater is used in a room with inadequate ventilation, a large amount of carbon monoxide may be built up within a short time. Pursuant to the Gas Safety Ordinance, flueless gas water heaters are not allowed to be installed to serve a bathroom in Hong Kong.

Carbon monoxide is a colourless, odourless and tasteless gas which is a by-product from incomplete combustion of any fuel which contains carbon, such as wood, natural gas and gasoline. Exposure to a low concentration of carbon monoxide can lead to a range of symptoms such as dizziness, a headache, tiredness and nausea; whereas exposure to a high concentration of carbon monoxide can lead to impaired vision, disturbed co-ordination, unconsciousness, brain damage or even death.

The CHP and the EMSD reminded members of the public that gas water heaters should be used in a well-ventilated area. They should seek medical attention immediately if suspected of developing symptoms of carbon monoxide poisoning.

The EMSD reminded members of the public of the following:

1. Occupants should buy and use a gas water heater which has been approved by the EMSD and bears a "GU" mark;
2. All installations, replacements or repair work on gas water heaters must be carried out by a registered gas installer employed by a registered gas contractor. Otherwise, it would be liable to contravention of the Gas Safety Ordinance and offenders are liable to prosecution;
3. Gas appliances including gas water heaters and gas cookers should be used in well-ventilated areas, helped by switching on extraction fans and not closing all windows and doors; and
4. Occupants should arrange a regular safety inspection of a gas water heater every 18 months by a registered gas contractor. If the gas water heater has incurred damage or abnormalities during operation, please stop using it immediately and contact the registered gas supply company.